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FIG. 1A

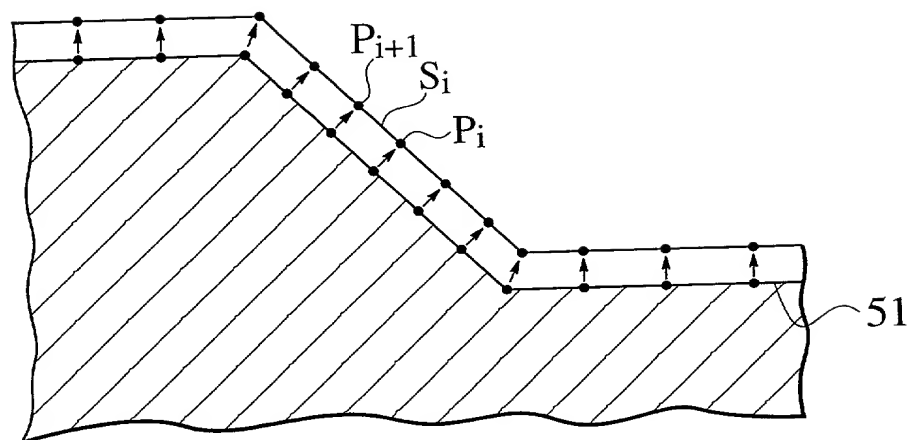
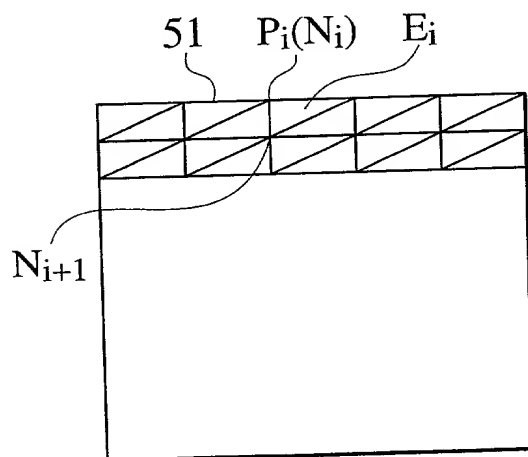
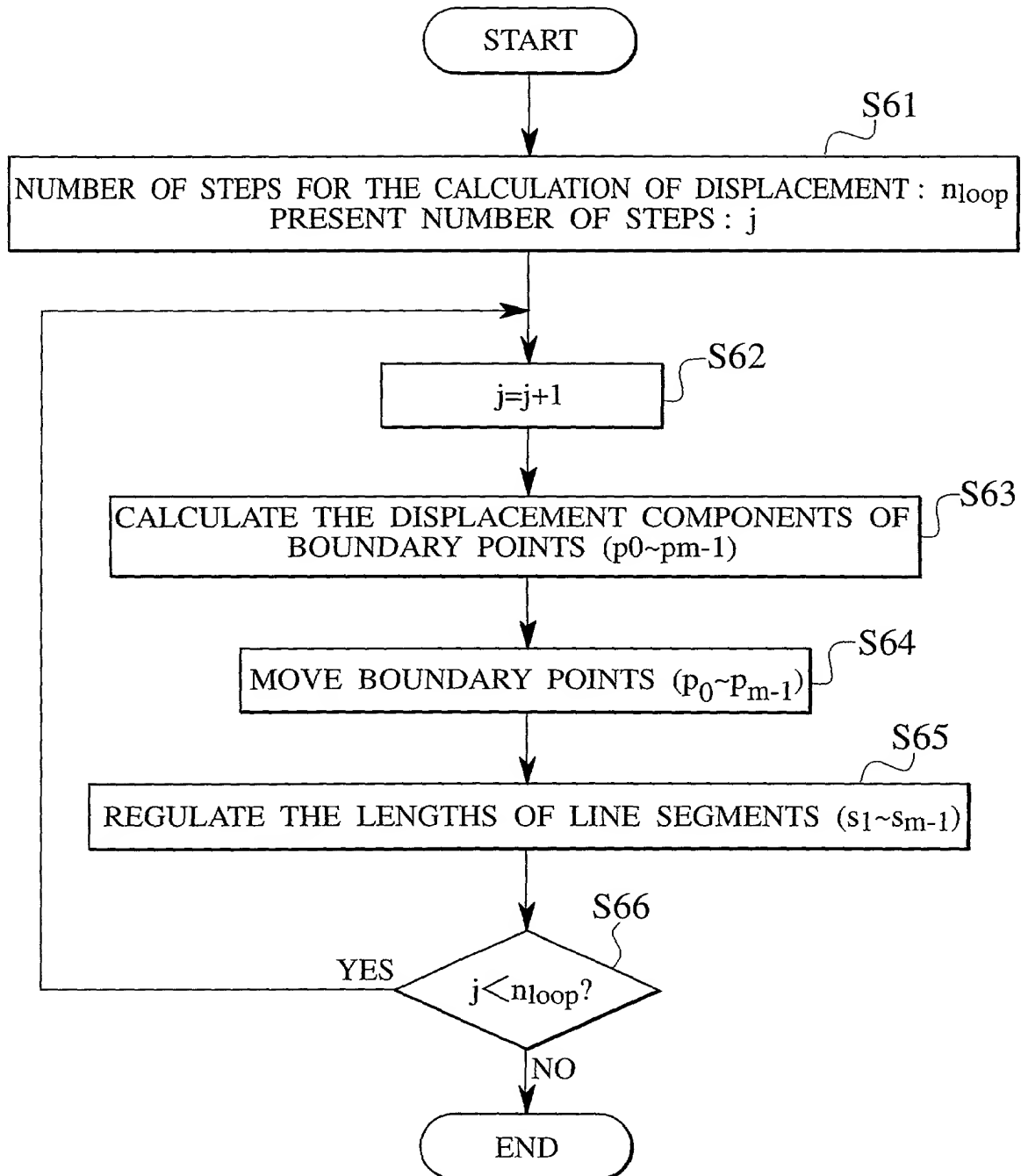


FIG. 1B



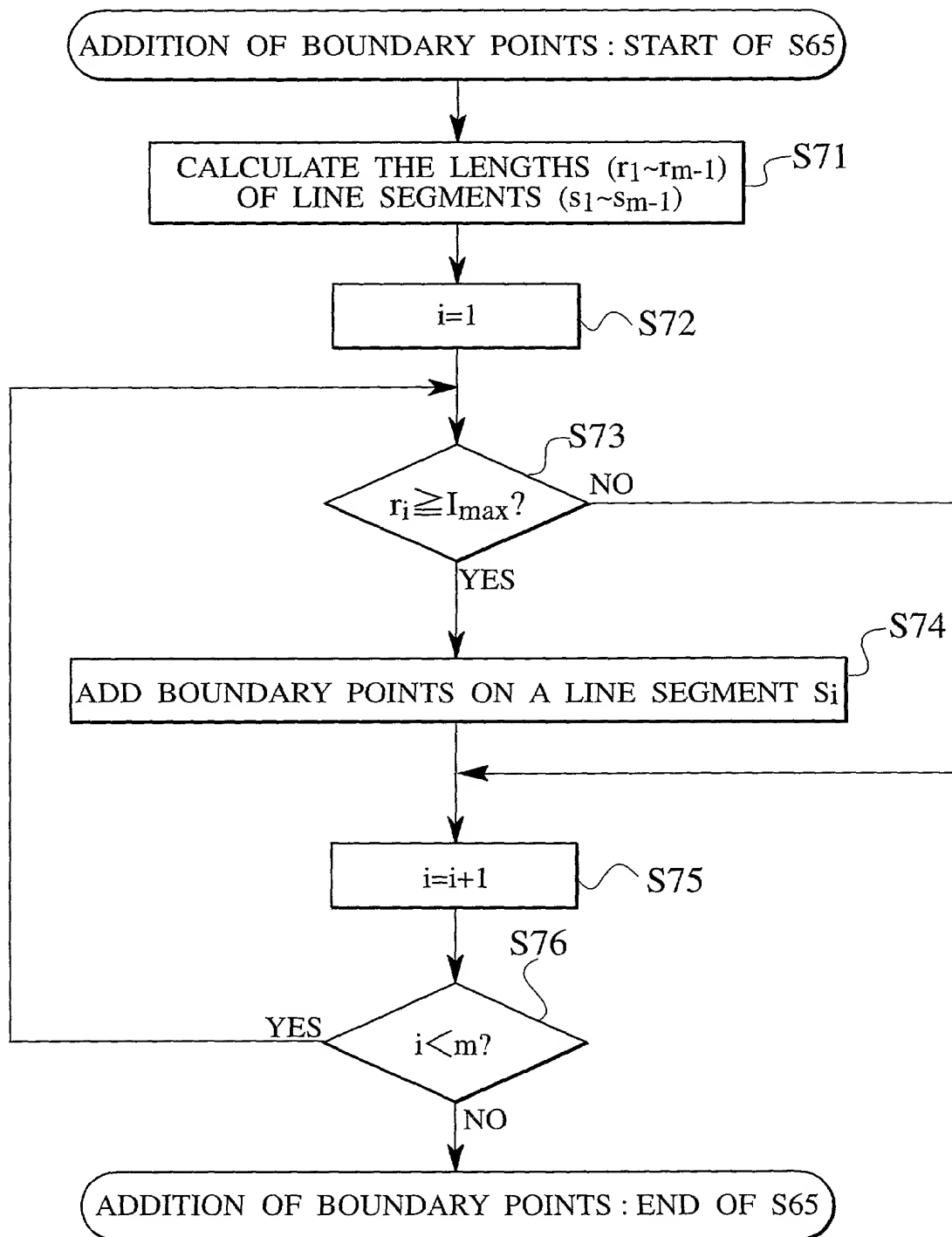
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FIG. 2  
PRIOR ART



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FIG. 3  
PRIOR ART



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FIG. 4  
PRIOR ART

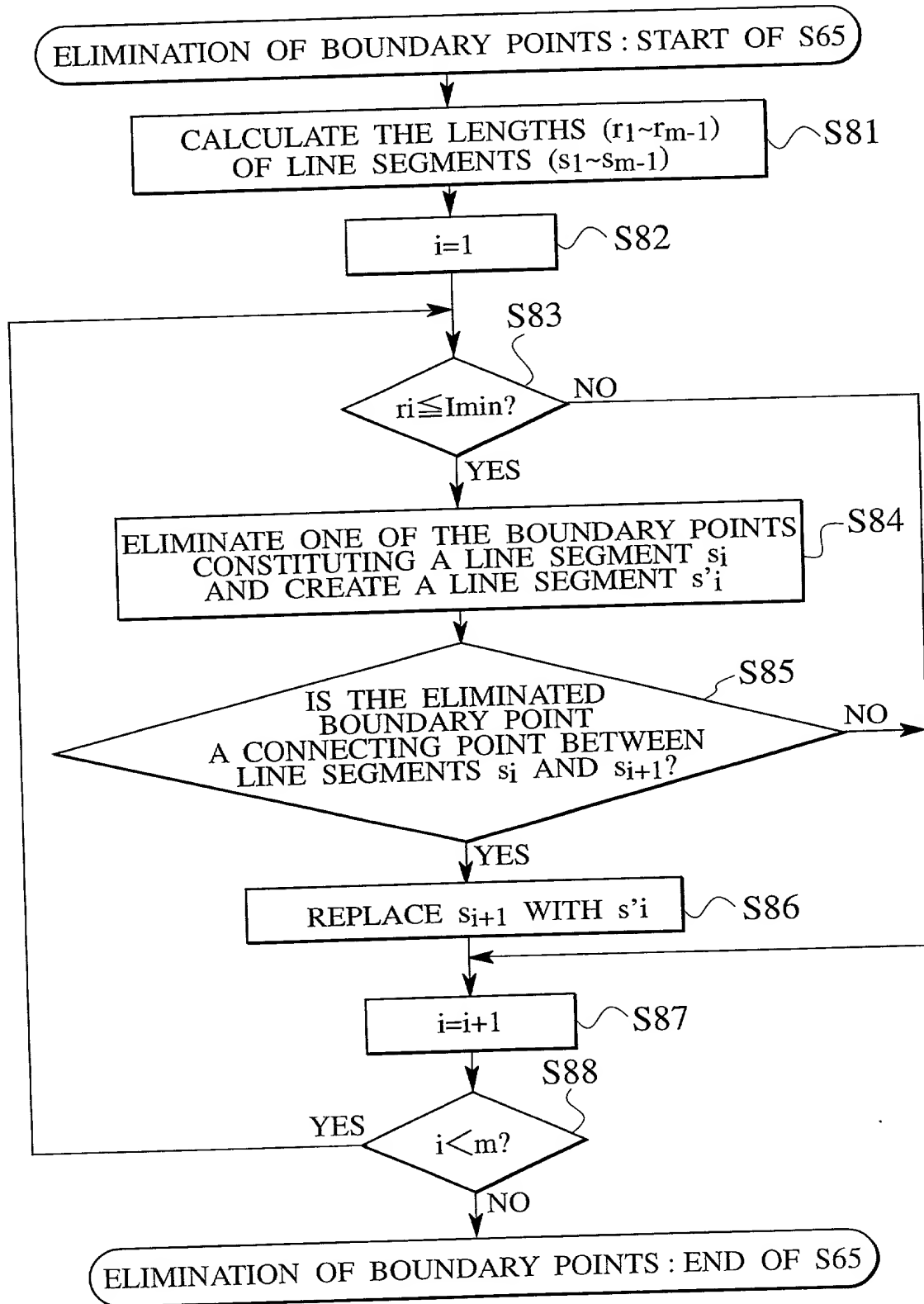


FIG. 5A

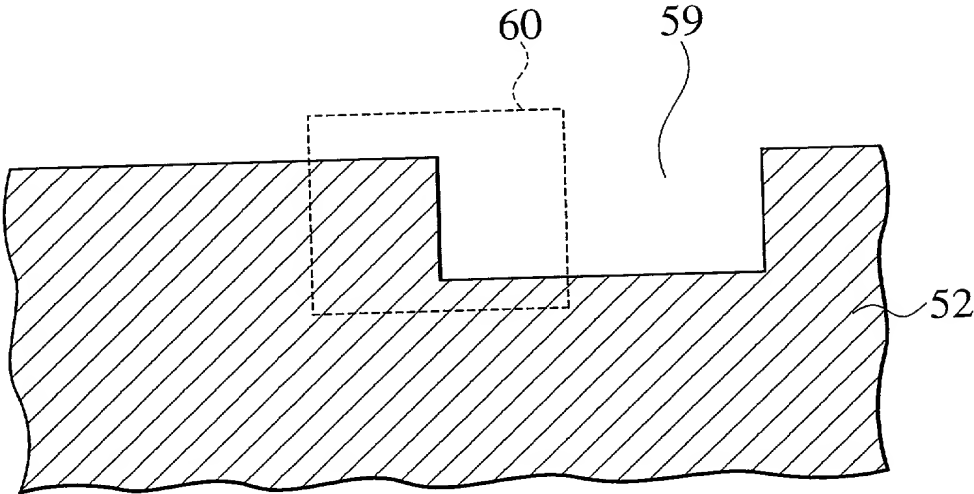
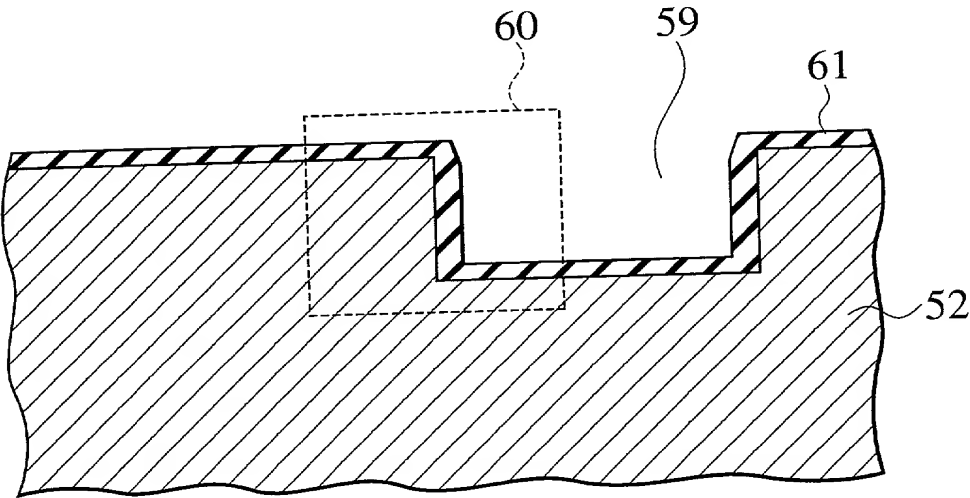


FIG. 5B



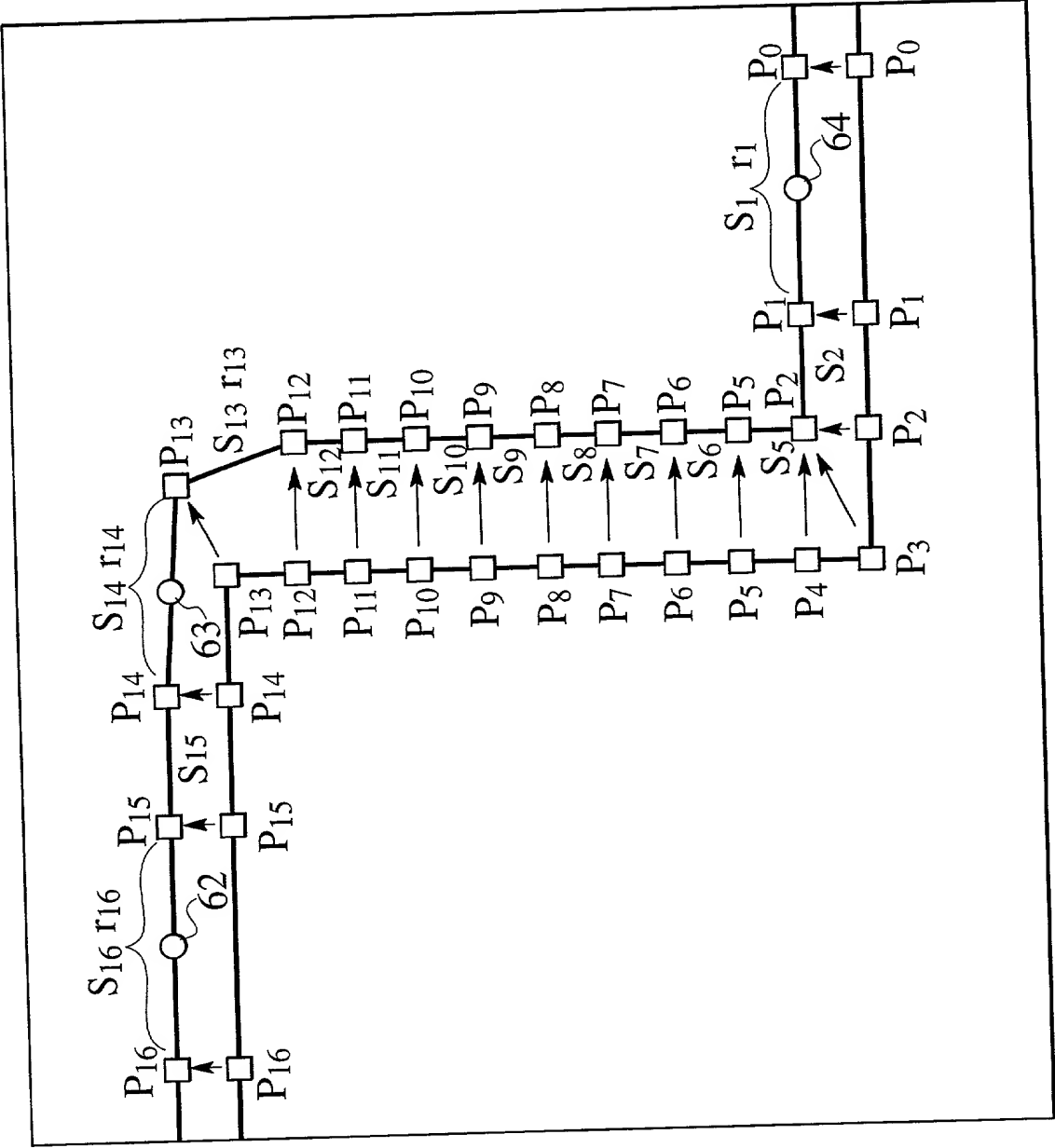


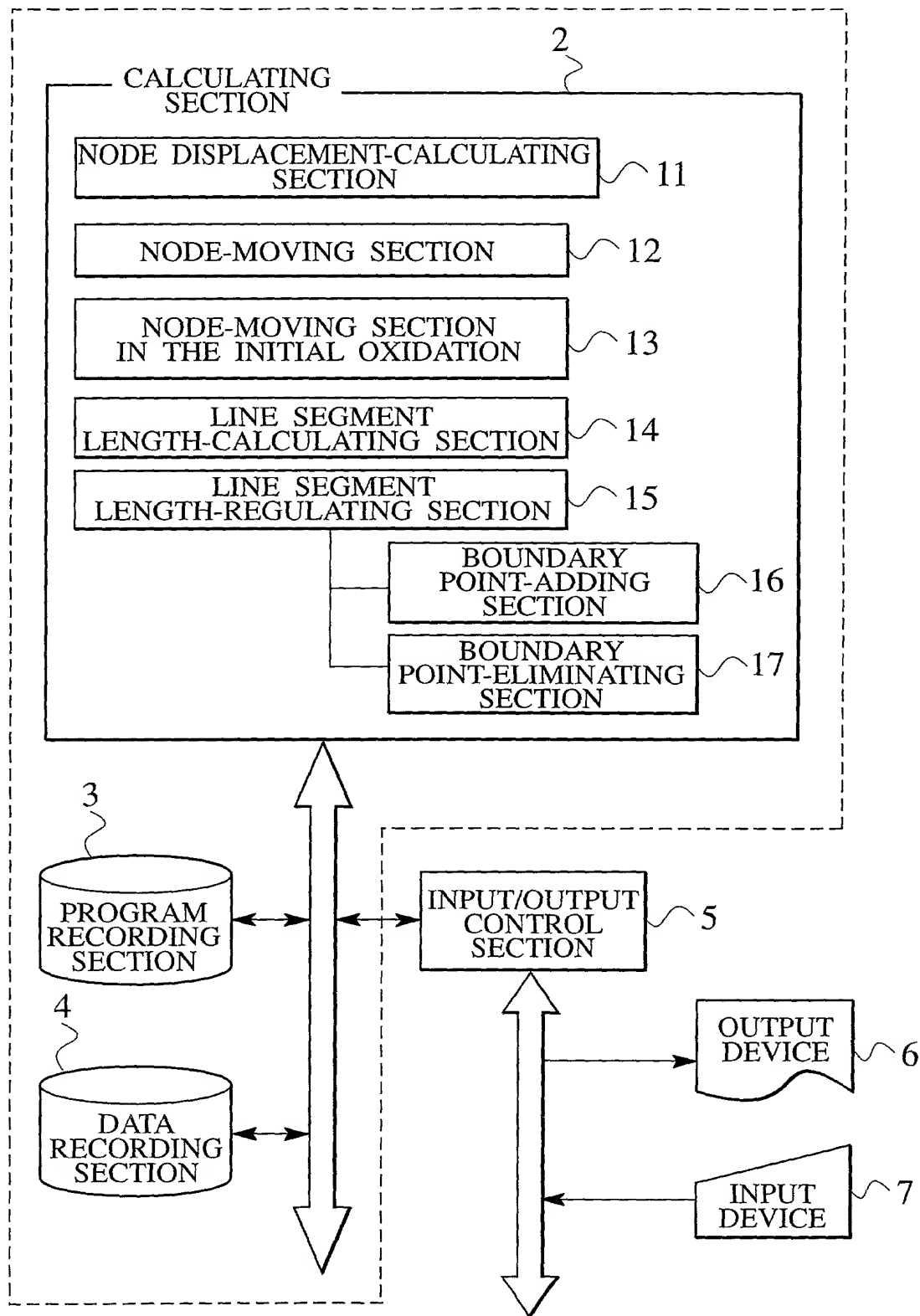
FIG. 6  
PRIOR ART

FIG. 6 PRIOR ART

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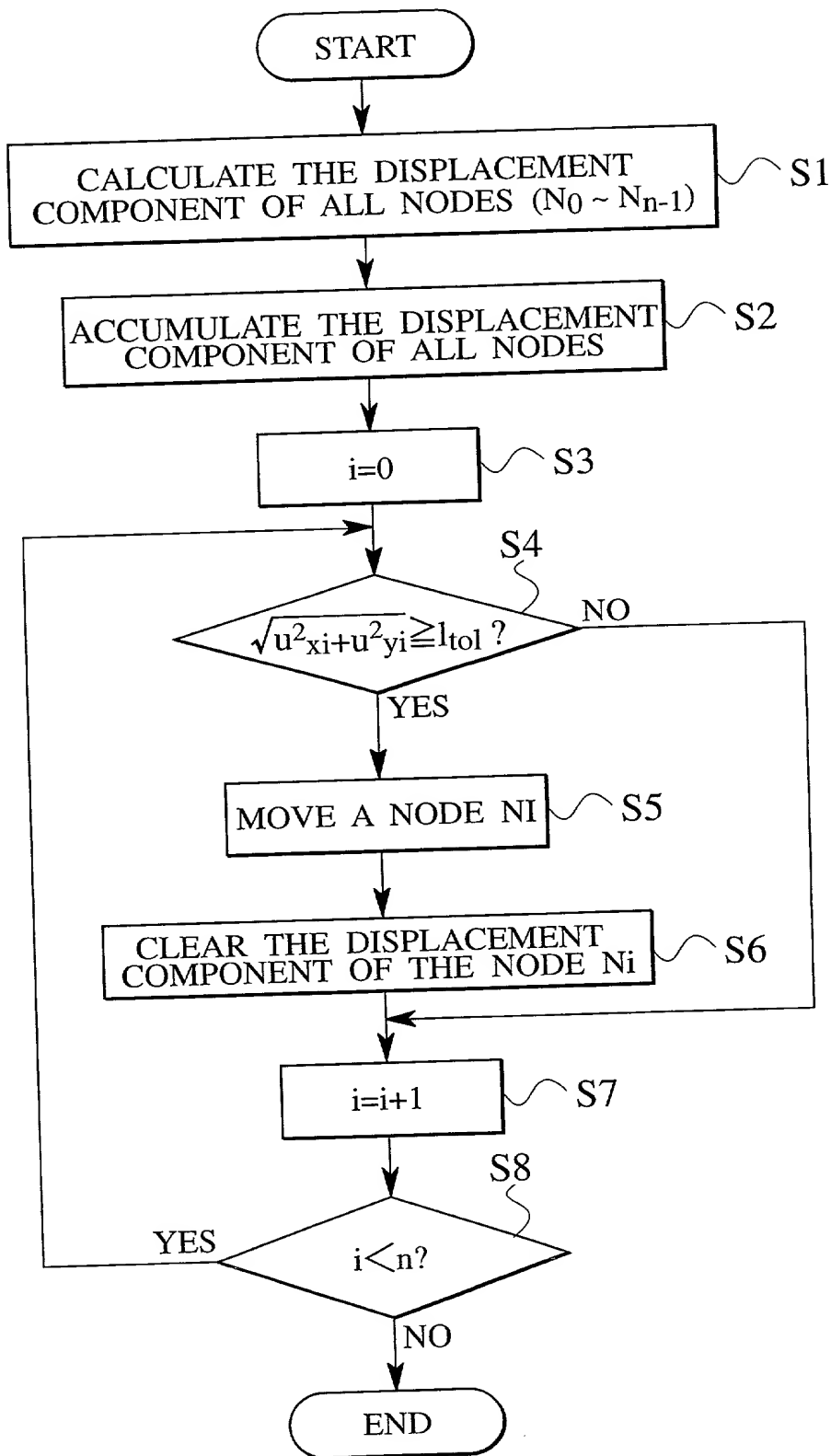
FIG. 7

SIMULATOR 1



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FIG. 8





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FIG. 9A

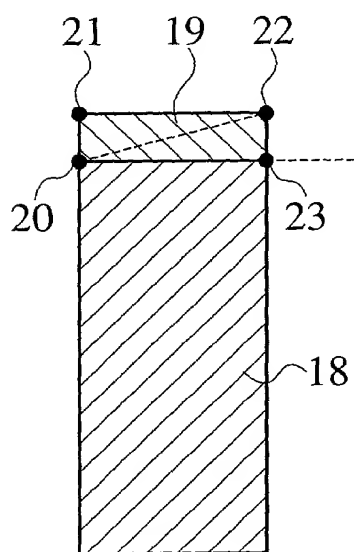


FIG. 9B

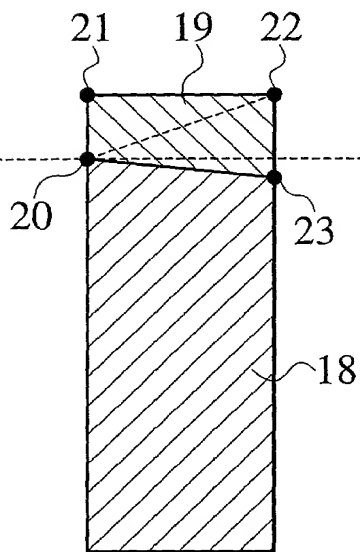
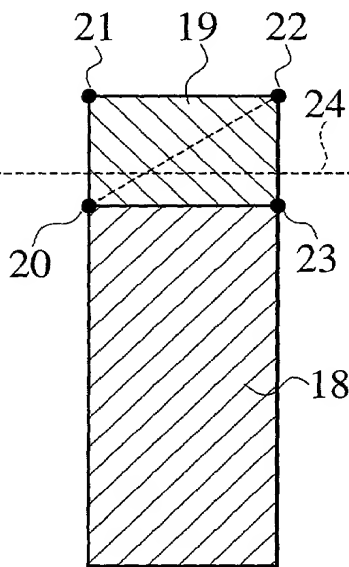
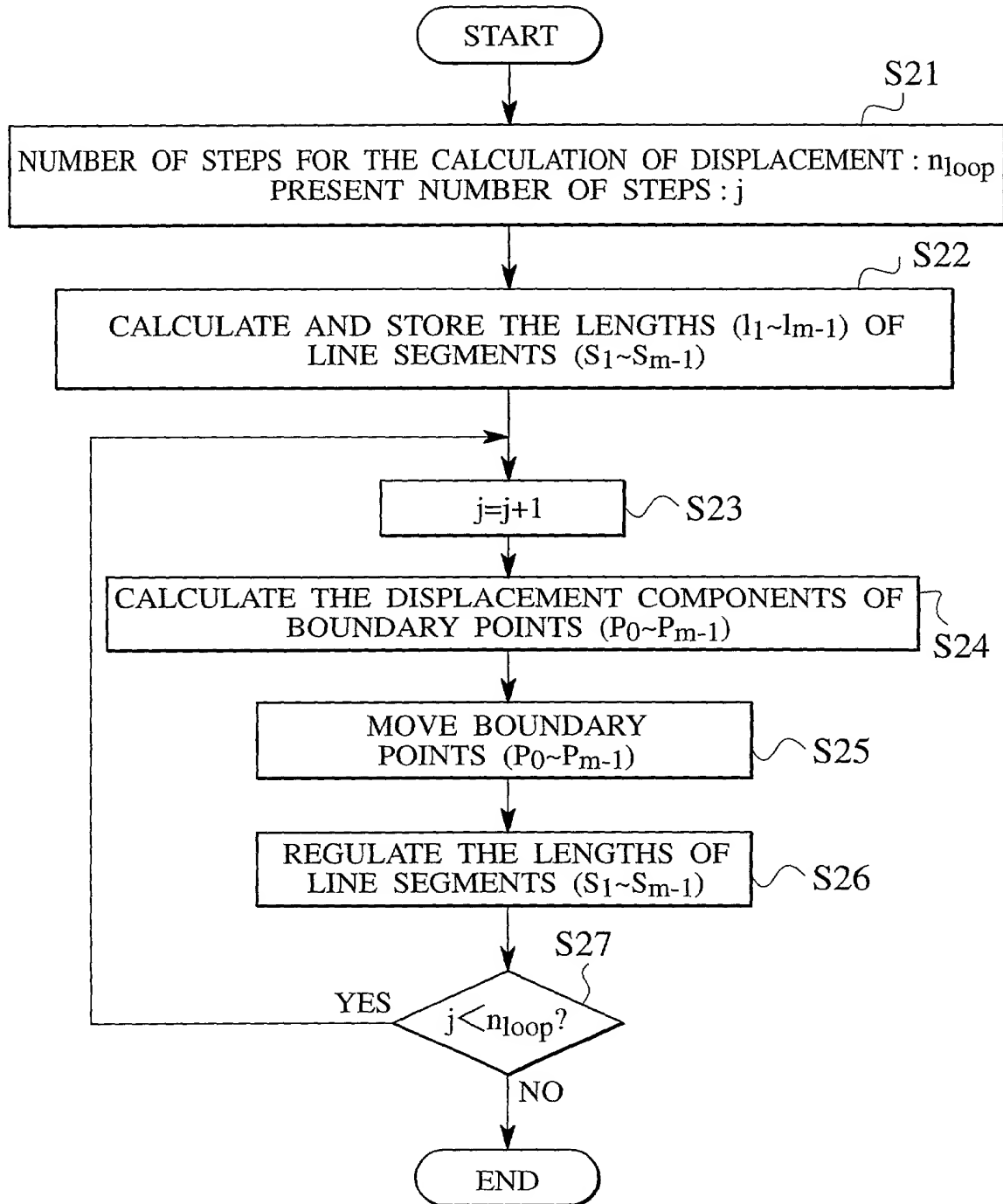


FIG. 9C



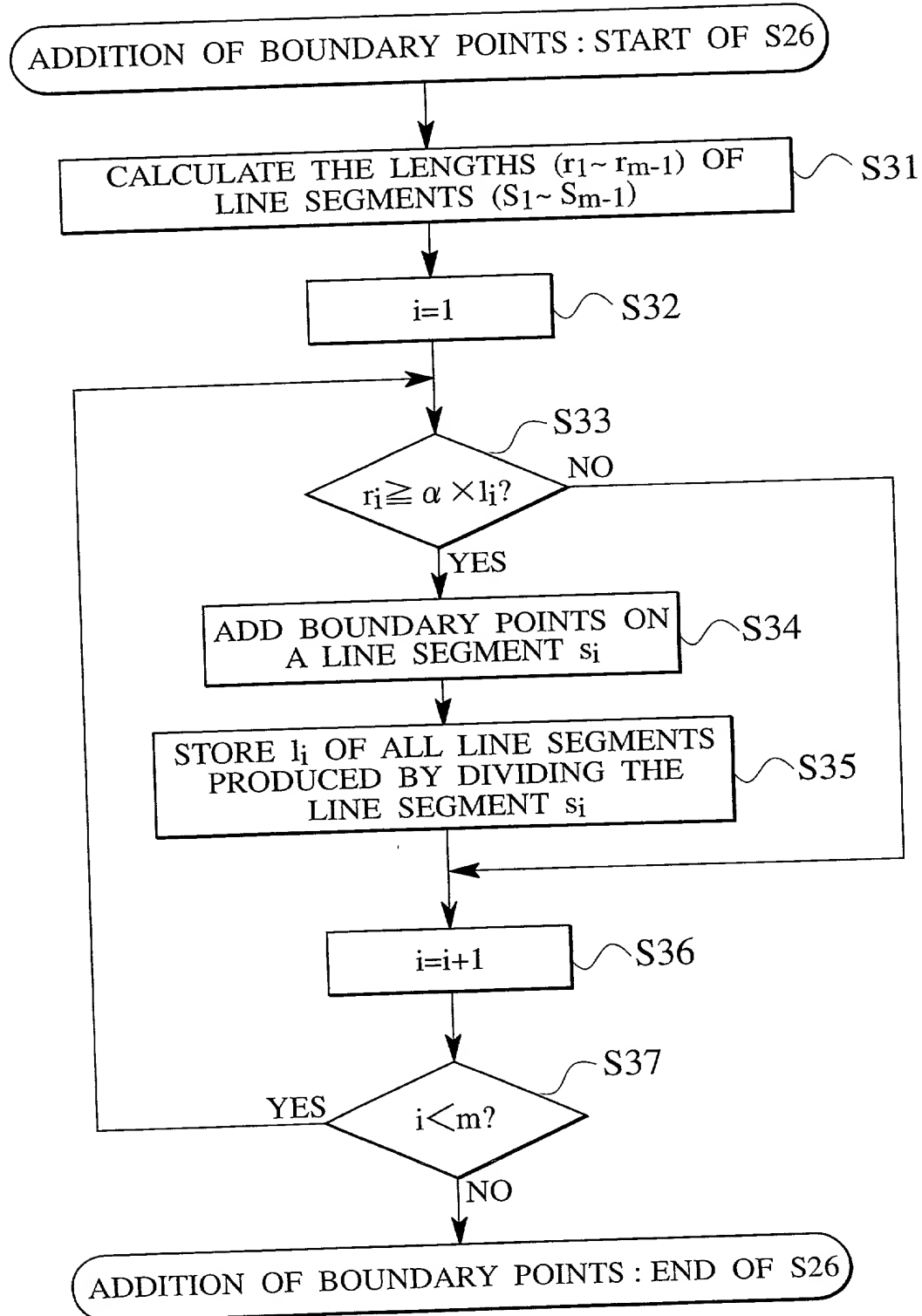
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FIG. 10



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FIG. 11



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FIG. 12

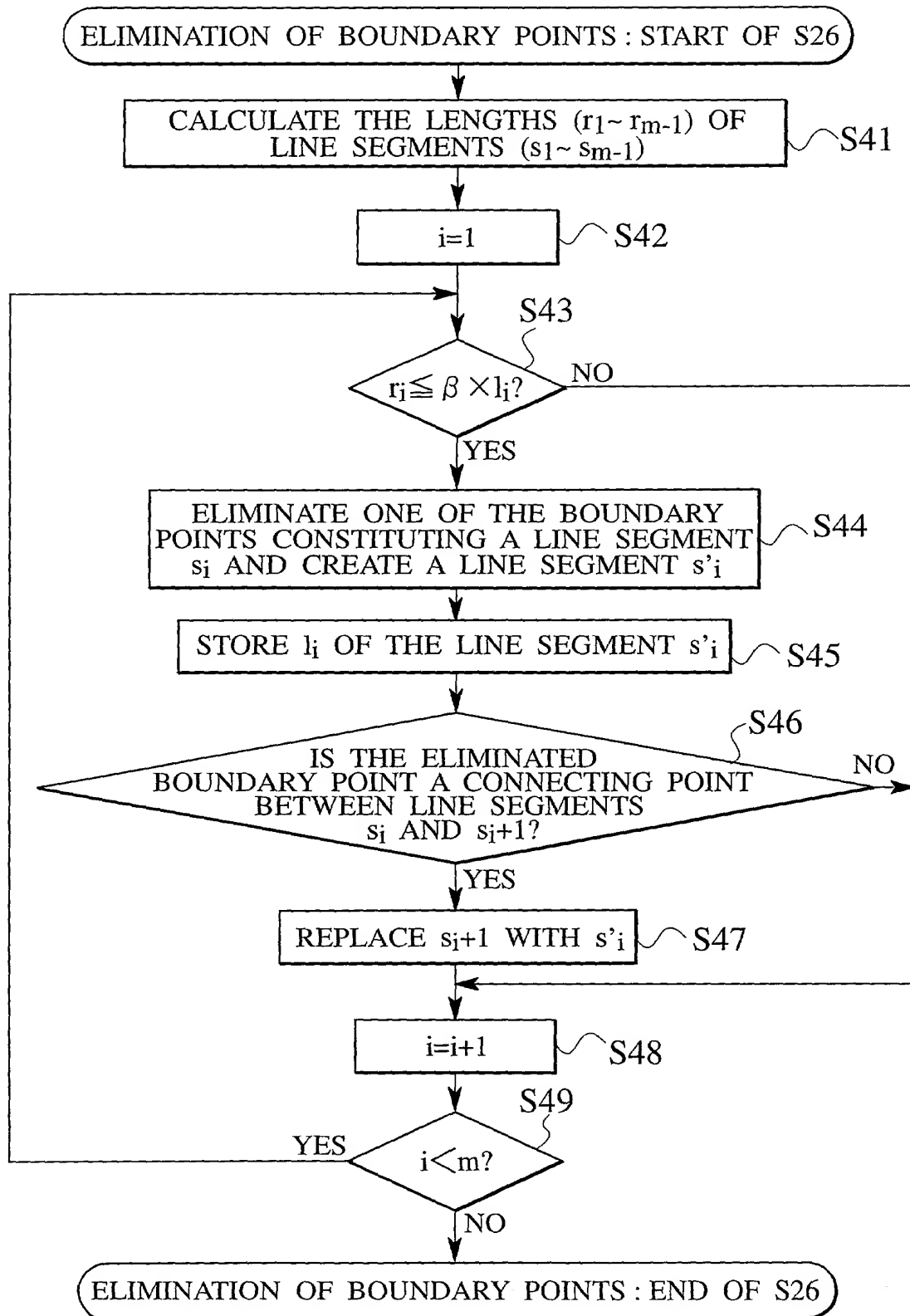
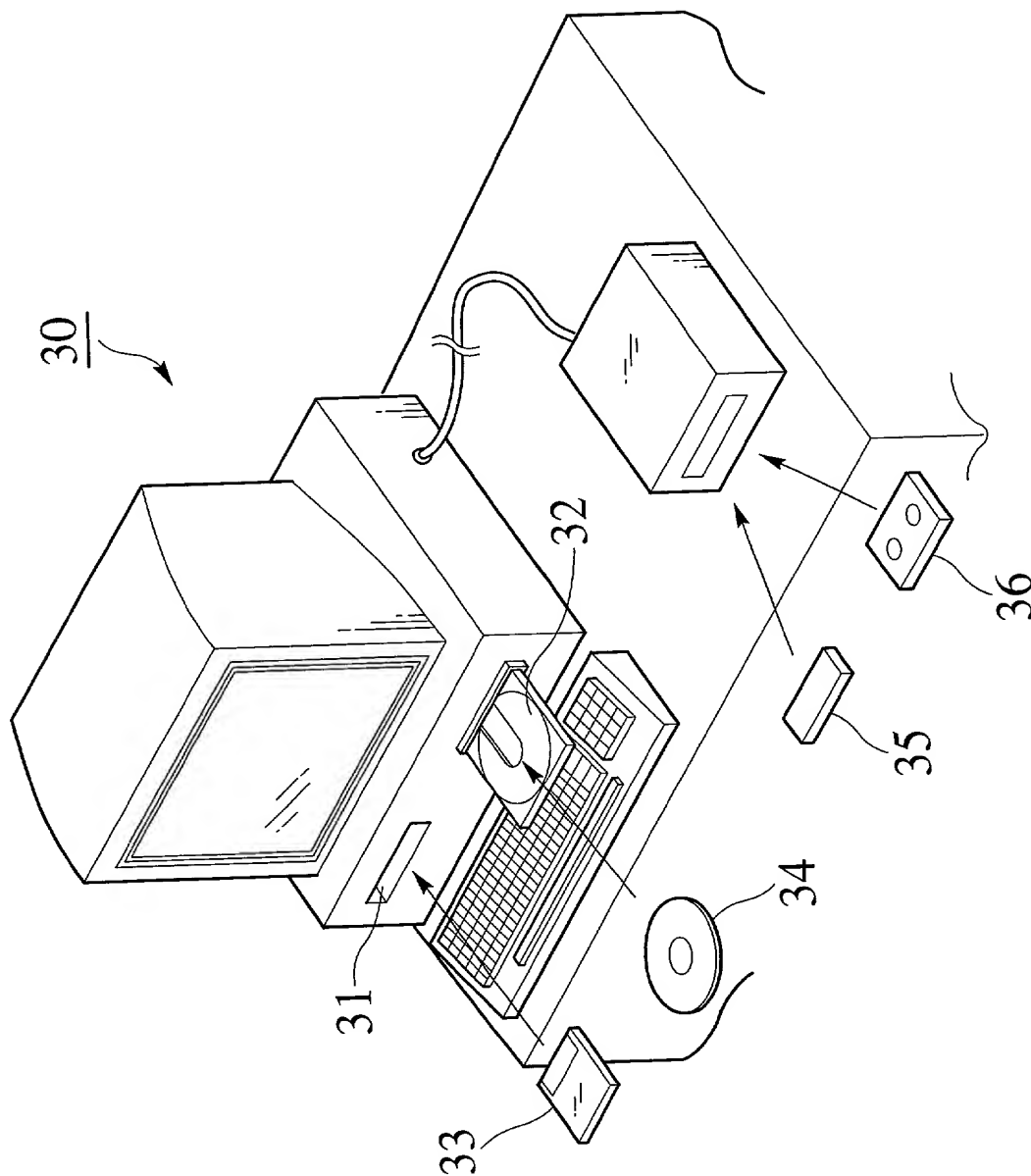


FIG. 13

NUMBER	BOUNDARY POINT (P)			LENGTH OF A LINE SEGMENT (S)		
	POSITION COORDINATES		POSITION COORDINATES DISPLACEMENT (U)	BEFORE MOVEMENT (l)	BEFORE THE REGULATION OF THE LENGTH AFTER MOVEMENT(r)	AFTER THE REGULATION OF THE LENGTH (l)
	x	y				
0	x <sub>0</sub>	y <sub>0</sub>	U <sub>x0</sub>	U <sub>y0</sub>		
1	x <sub>1</sub>	y <sub>1</sub>	U <sub>x1</sub>	U <sub>y1</sub>	l <sub>1</sub>	r <sub>1</sub>
2	x <sub>2</sub>	y <sub>2</sub>	U <sub>x2</sub>	U <sub>y2</sub>	l <sub>2</sub>	r <sub>2</sub>
3	x <sub>3</sub>	y <sub>3</sub>	U <sub>x3</sub>	U <sub>y3</sub>	l <sub>3</sub>	r <sub>3</sub>
⋮						
i	x <sub>i</sub>	y <sub>i</sub>	U <sub>xi</sub>	U <sub>yi</sub>	l <sub>i</sub>	r <sub>i</sub>
⋮						
n-1	x <sub>n-1</sub>	y <sub>n-1</sub>	U <sub>xn-1</sub>	U <sub>yn-1</sub>	l <sub>n-1</sub>	r <sub>n-1</sub>

FIG. 14



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FIG. 15A

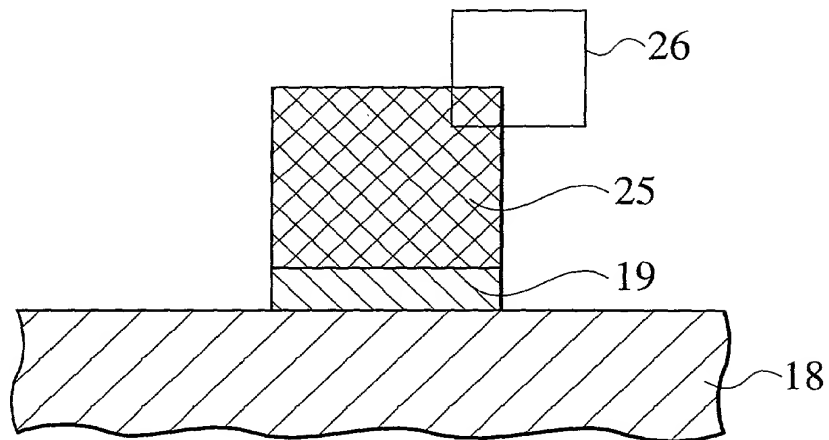


FIG. 15B

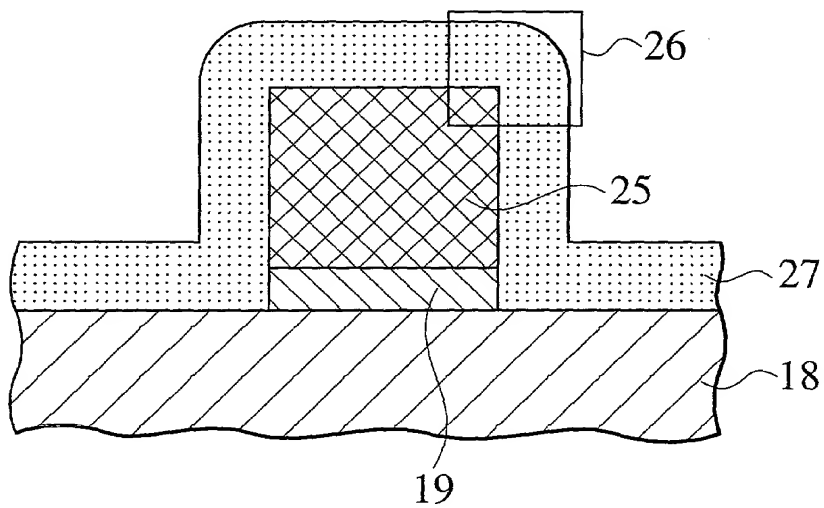


FIG. 16

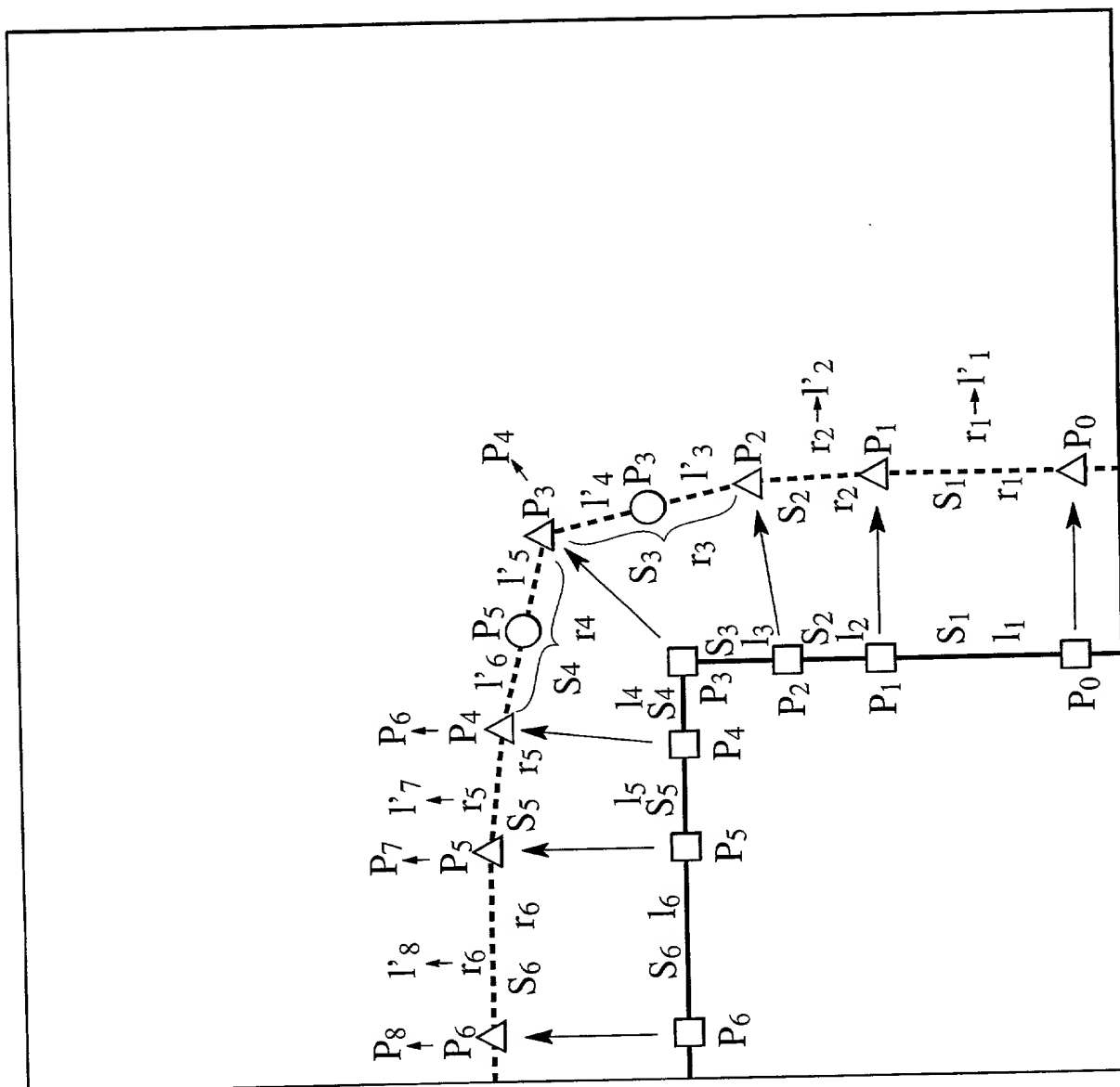




FIG. 17

NUMBER	BOUNDARY POINT (P)			LENGTH OF A LINE SEGMENT (S)		
	POSITION COORDINATES		POSITION COORDINATES DISPLACEMENT (U)	BEFORE MOVEMENT (I)	BEFORE THE REGULATION OF THE LENGTH AFTER MOVEMENT(r)	AFTER THE REGULATION OF THE LENGTH (I)
	COORDINATES					
	X	y				
0	X <sub>0</sub>	y <sub>0</sub>	0	0		
1	X <sub>1</sub>	y <sub>1</sub>	0	0	l <sub>1</sub>	
2	X <sub>2</sub>	y <sub>2</sub>	0	0	l <sub>2</sub>	
3	X <sub>3</sub>	y <sub>3</sub>	0	0	l <sub>3</sub>	
4	X <sub>4</sub>	y <sub>4</sub>	0	0	l <sub>4</sub>	
5	X <sub>5</sub>	y <sub>5</sub>	0	0	l <sub>5</sub>	
6	X <sub>6</sub>	y <sub>6</sub>	0	0	l <sub>6</sub>	

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FIG. 18

NUMBER	BOUNDARY POINT (P)			LENGTH OF A LINE SEGMENT (S)		
	POSITION COORDINATES		POSITION COORDINATES DISPLACEMENT (U)	BEFORE MOVEMENT (l)	BEFORE THE REGULATION OF THE LENGTH AFTER MOVEMENT(r)	AFTER THE REGULATION OF THE LENGTH (l)
	x	y				
	x	y	U <sub>x</sub>	U <sub>y</sub>		
0	x <sub>0</sub>	y <sub>0</sub>	U <sub>x0</sub>	U <sub>y0</sub>		
1	x <sub>1</sub>	y <sub>1</sub>	U <sub>x1</sub>	U <sub>y1</sub>	l <sub>1</sub>	
2	x <sub>2</sub>	y <sub>2</sub>	U <sub>x2</sub>	U <sub>y2</sub>	l <sub>2</sub>	
3	x <sub>3</sub>	y <sub>3</sub>	U <sub>x3</sub>	U <sub>y3</sub>	l <sub>3</sub>	
4	x <sub>4</sub>	y <sub>4</sub>	U <sub>x4</sub>	U <sub>y4</sub>	l <sub>4</sub>	
5	x <sub>5</sub>	y <sub>5</sub>	U <sub>x5</sub>	U <sub>y5</sub>	l <sub>5</sub>	
6	x <sub>6</sub>	y <sub>6</sub>	U <sub>x6</sub>	U <sub>y6</sub>	l <sub>6</sub>	

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FIG. 19

NUMBER	BOUNDARY POINT (P)				LENGTH OF A LINE SEGMENT (S)		
	POSITION COORDINATES		POSITION COORDINATES DISPLACEMENT (U)		BEFORE MOVEMENT (l)	BEFORE THE REGULATION OF THE LENGTH AFTER MOVEMENT(r)	AFTER THE REGULATION OF THE LENGTH (l)
	X	y	U <sub>x</sub>	U <sub>y</sub>			
0	x'0	y'0	0	0			
1	x'1	y'1	0	0	l <sub>1</sub>	r <sub>1</sub>	
2	x'2	y'2	0	0	l <sub>2</sub>	r <sub>2</sub>	
3	x'3	y'3	0	0	l <sub>3</sub>	r <sub>3</sub>	
4	x'4	y'4	0	0	l <sub>4</sub>	r <sub>4</sub>	
5	x'5	y'5	0	0	l <sub>5</sub>	r <sub>5</sub>	
6	x'6	y'6	0	0	l <sub>6</sub>	r <sub>6</sub>	

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FIG. 20

NUMBER	BOUNDARY POINT (P)		LENGTH OF A LINE SEGMENT (S)				
	POSITION COORDINATES		POSITION COORDINATES DISPLACEMENT (U)		BEFORE MOVEMENT (l)	BEFORE THE REGULATION OF THE LENGTH AFTER MOVEMENT(r)	AFTER THE REGULATION OF THE LENGTH (l')
	X	y	U <sub>x</sub>	U <sub>y</sub>			
0	x'0	y'0	0	0			
1	x'1	y'1	0	0	l <sub>1</sub>	r <sub>1</sub>	r <sub>1</sub>
2	x'2	y'2	0	0	l <sub>2</sub>	r <sub>2</sub>	r <sub>2</sub>
3	x'7	y'7	0	0	l <sub>3</sub>	r <sub>3</sub>	l' <sub>3</sub>
4	x'3	y'3	0	0	l <sub>4</sub>	r <sub>4</sub>	l' <sub>4</sub>
5	x'8	y'8	0	0	l <sub>5</sub>	r <sub>5</sub>	l' <sub>5</sub>
6	x'4	y'4	0	0	l <sub>6</sub>	r <sub>6</sub>	l' <sub>6</sub>
7	x'5	y'5	0	0			r <sub>5</sub>
8	x'6	y'6	0	0			r <sub>6</sub>

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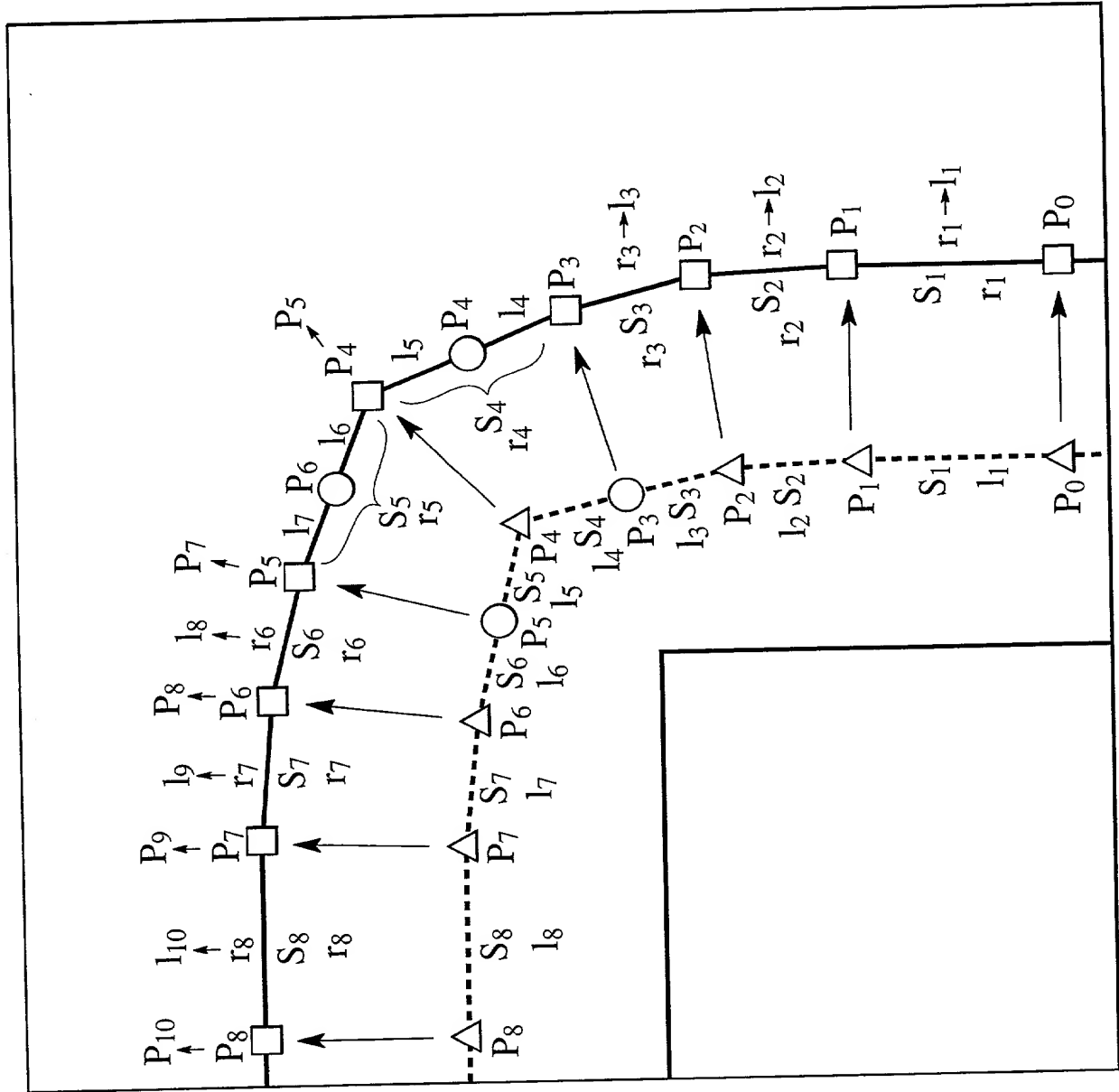


FIG. 21

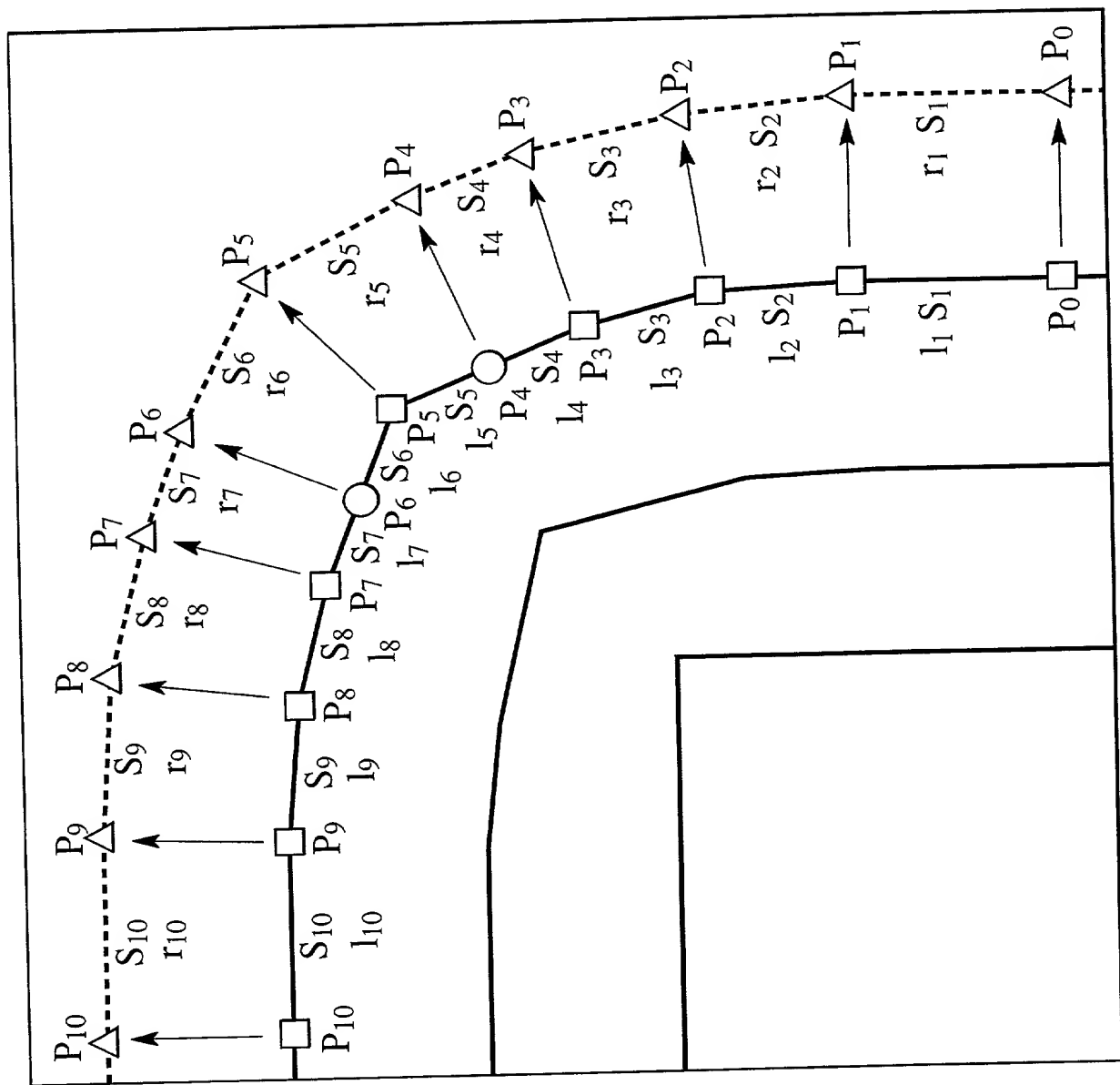


FIG. 22

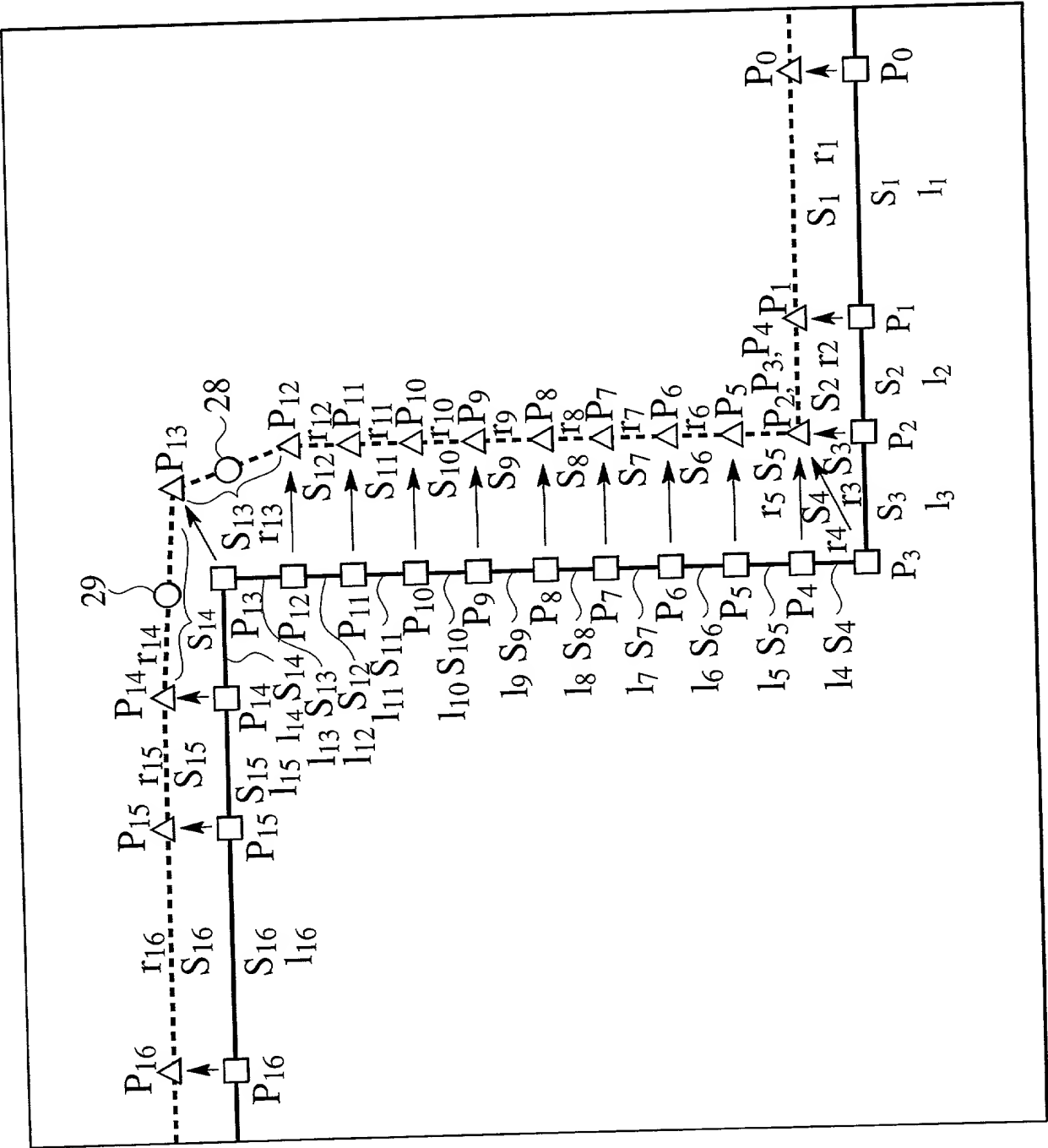


FIG. 23